

WHAT IS CLAIMED IS:

1. A lens apparatus for detecting inaccuracy of machining of a finished workpiece, comprising:

5 a hollow body including a cylindrical downward extension having inner threads, an intermediate cubic passageway, a channel at one side of the passageway, four threaded holes at four sides of the passageway, an upper cubic cavity, and a shoulder interconnected the cavity and the passageway, the shoulder having four threaded holes at four corners;

10 a hollow cylinder having an externally threaded section threadably secured to the inner threads of the body and a narrow, lower externally threaded portion projected downward from the extension of the body, the lower externally threaded portion having inner threads;

15 a sleeve put on a lower part of the body and including inner threads threadably secured to the lower externally threaded section, the sleeve being rotatable to adjust the cylinder;

a magnifying lens including an upper externally threaded section threadably secured to the inner threads of the lower externally threaded portion, a magnification of the magnifying lens being adjustable by rotating the sleeve;

20 a hollow cubic support seated on the passageway, the support including four corner projections and four threaded holes through the projections so as to permit a plurality of adjustment screws to drive through the projections to urge against the support for fine adjustment;

25 a square image processor seated on the projections so as to permit a plurality of bolts to drive through four corners of the image processor into the projections for fastening the image processor in the support, the image processor including a bottom lens and a top connector coupled to a cable of a monitor via the channel; and

a cubic positioning member including four threaded holes at four corners for permitting a plurality of bolts to drive through and into the shoulder for securing the positioning member to the body, and a plurality of holes for permitting a plurality of fasteners to drive through for fastening a shaft of a machine,

wherein a tool is removed from the shaft, the lens apparatus is mounted under the shaft, a display is coupled to the machine, a left side of the workpiece is machined by moving the table to align the left side of the workpiece with a reference point of the lens for determining whether the workpiece is aligned or not by watching the monitor, data shown on the display is initialized if the workpiece has been aligned, the table is adjusted to align a right side of the workpiece with the reference point for determining whether the workpiece is aligned or not by watching the monitor, it is determined whether there is an inaccuracy of machining of the workpiece or not by watching updated data on the display, the lens apparatus is removed, and the tool is replaced with a second tool for correcting the machining process if an inaccuracy occurs in response to finishing the workpiece on a table of the machine in a machining process.

2. The lens apparatus of claim 1, wherein the image processor is a CCD (charge coupled device).